forms a striking part of the great bird chorus rising at that season in the North.

The Eskimo name indicates that its notes are like those of the walrus, hence the term they give it — 'walrus talker.'

Since my return from the North my attention has been called to a note in the 'Proceedings' of the Zoological Society of London (1859, p. 130), where it appears that Dr. Adams noted the peculiar habits of this bird above detailed when, in 1858, he passed a season at St. Michael's.

These Sandpipers were beginning to nest when I left the Yukon Mouth, and in one instance a female was seen engaged in preparing a place for her eggs in a tuft of grass; but the spot was abandoned before the eggs were laid.

In autumn its habits in the Far North are precisely those so familiar to all who know the bird in its southern haunts.

THE MIGRATION OF OUR WINTER BIRDS.

BY S. W. WILLARD.

IN the October (1883) number of the 'Bulletin of the Nuttall Ornithological Club' it is asked, "Why do Owls, Grosbeaks, Crossbills, and some other northern birds come south in winter?" Lack of food and extreme cold are stated as being insufficient reasons to explain this movement. As the birds are usually fat when they arrive, they hence cannot have lacked for food farther north. It also states, "the idea that any of these birds feel the cold is not entitled to a moment's consideration." Mr. William Brewster, after quoting the above, attempts to explain the question on the ground that "Birds, like many other beings, are fond of variety." He says: "The truth of the matter probably is, that when their breeding season is over, these birds habitually wander over vast extents of country. If the winter happens to be severe in the north they find a gradual improvement in conditions southward, and naturally, taking this direction, push on until a land of plenty is reached. . . . . Thus they come and go, sometimes without apparent regard to conditions which govern the movements of our more regular migratory visitors."

We must acknowledge that birds do not differ so much from other animals as not to have the custom of wandering. The variation in the numbers of our resident species is due, to some extent, to this natural habit, but can this alone be sufficient to explain the movements of our northern birds? Do they breed so late in the season that this flight is taken before the excitement incident to their nesting has subsided, or do they leave their northern homes merely from the ordinary passion for wandering? That there is a subtle incentive to migration inherent in these species seems almost evident; but is this impulse due to reproduction, or is it analogous to the impulse that urges our regular migrants southward on the return of autumn? The latter seems to me the more plausible explanation; for why should this movement take place in the fall, or during the months of November and December, if it were occasioned by a mere desire to wander? Would it not be more natural to find these birds in southern latitudes in September and October, if wandering was the only incentive? During these months the weather is cool and apparently more conducive to long flights than the sharp, benumbing cold of later months. But this is not the case. We find these birds here just prior to or during the first genuine cold spell in the fall, which, in Northern Wisconsin, usually occurs about November 20. The majority of these visitors appear to remain but a short time, returning seemingly to their northern latitudes, even though the weather still continues cold.

By a systematic study of the avian fauna of Brown and Ontagamic counties.* I have found that the migratory instinct is represented in nearly all of its stages. We find birds that return southward during the fullness of vegetation and abundance of insect life; and species in which this instinct is not so well developed, but which take their departure only when spurred onward by the movements of other migrants, or the lowering of the temperature. Still others are represented in which this instinct is nearly dormant, and which seems only capable of being aroused by intense cold, such as usually occurs during the appearance of the more northern species in southern latitudes.

At the time when the greater part of animal life was confined

* In a paper read before the Wisconsin Academy of Sciences, Arts and Letters, at Madison, Dec., 1883, I arranged the birds of these counties in classes according to their migratory habits, and from this consideration I arrived at the conclusion given in this article.

within the tropics, our northern species were undoubtedly among the prisoners, and, with the throngs of other migrants, acquired the habit of pushing each spring towards the receding barrier, returning in the fall to a more congenial clime. But being a stronger and hardier class, these birds soon became aware that there was for them no necessity for a southern journey as extended as their allies were obliged to take.

Evidently the migratory habit, once so strong, is becoming dormant among some species, and only upon the sudden occurrence of intense cold is it awakened sufficiently to exert any influence whatever over the more rugged northern species.

Exceptional movements certainly occur, but owing to the high ornithological interest and conspicuousness of these northern species — coming at a time when other bird-life is absent — their movements are oftener recorded and are much more noticeable than similar ones among our commoner birds at seasons when each patch of woodland is filled with the notes of its hundreds of feathered occupants.

DESCRIPTION OF A NEW SONG SPARROW FROM THE SOUTHERN BORDER OF THE UNITED STATES.

BY H. W. HENSHAW.

In 1874 I collected several Song Sparrows in the southern portion of Arizona, which appeared to differ remarkably from those obtained to the northward in various portions of the Great Basin. Being under the impression that these specimens represented merely the extreme degree of variation of the interior race, they were labelled *fallax* and passed by. Since then I have seen other specimens from this region, and especially a series of twenty-one collected, at my request, at Tucson by my friend Mr. E. W. Nelson. From a comparison of all these with the very extensive series of Song Sparrows from the interior of the United States, contained in the National collection and in my own Museum, I am satisfied that there exist two well-defined races in the Great Basin, where hitherto there has been supposed to be but one. One of these is, of course, the *fallax* of Baird. The